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Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”

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IS:5875-1970

(Reaffirmed 1987)

Indian Standard

SPECIFICATION FOR OPEN-DECK SCUPPERS

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**BUREAU OF INDIAN STANDARDS
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002**

Indian Standard

SPECIFICATION FOR OPEN-DECK SCUPPERS

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SPECIFICATION FOR OPEN-DECK SCUPPERS

0. FOREWORD

0.1 This Indian Standard was adopted by the Indian Standards Institution on 3 November 1970, after the draft finalized by the Shipbuilding Sectional Committee had been approved by the Mechanical Engineering Division Council.

0.2 Scuppers sufficient in number and size are provided on all open decks of ships to provide effective drainage.

0.3 In the preparation of this standard, considerable assistance has been derived from DIN 87201 (Draft), 'Scuppers with grating bars', issued by Deutscher Normenausschuss.

0.4 For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS: 2-1960*. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

1. SCOPE

1.1 This standard specifies the material and dimensions for open-deck scuppers used for drainage on board ships.

2. CONSTRUCTION

2.1 The open-deck scuppers shall be constructed as shown in the figure in Table 1 for different nominal sizes.

2.2 Open-deck scuppers may also be provided with portable grating, if required by the purchaser. Scupper head is shown in the figure in Table 2.

*Rules for rounding off numerical values (*revised*).

3. MATERIAL

3.1 The material used in the construction of open-deck scuppers shall be as shown below:

<i>Name of Part</i>	<i>Material</i>	<i>Relevant Indian Standard</i>
Scupper head	Shipbuilding quality steel	IS: 3039-1965*
Grating bars	Steel	IS: 2073-1962†

4. DIMENSIONS

4.1 The dimensions of the open-deck scuppers shall be as shown in Tables 1 to 3.

5. TOLERANCE

5.1 The tolerances on the machined parts shall be of the coarse series according to IS: 2102-1969‡.

6. WELDING

6.1 Welding, in general, shall be according to the relevant Indian Standards, and in particular, conform to IS: 3525-1966§.

7. DESIGNATION

7.1 The open-deck scuppers shall be designated by the nominal size and number of this standard:

Example:

An open-deck scupper of nominal dia 65 mm shall be designated as:

Open-Deck Scupper 65 IS: 5875

8. MARKING

8.1 The nominal diameter of the scupper shall be marked on the scupper head.

8.2 Open-deck scupper may also be marked with the ISI Certification Mark.

NOTE — The use of the ISI Certification Mark is governed by the provisions of the Indian Standards Institution (Certification Marks) Act, and the Rules and Regulations made thereunder. Presence of this mark on products covered by an Indian Standard

*Specification for structural steel (shipbuilding quality).

†Specification for carbon steel bars for production of machined parts for general engineering purposes.

‡Allowable deviations for dimensions without specified tolerances (first revision).

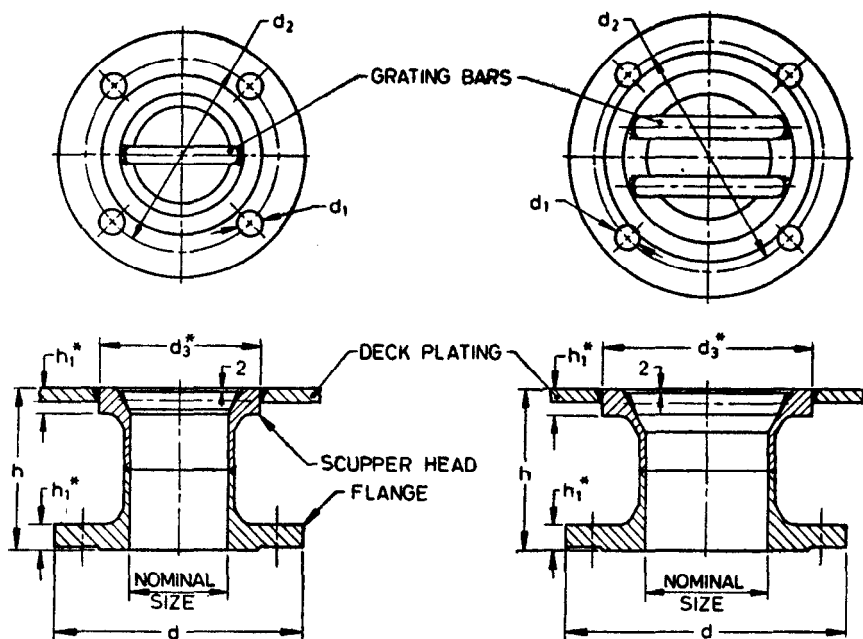
§Code of practice for use of metal arc welding for hull construction of merchant ships in mild steel.

conveys the assurance that they have been produced to comply with the requirements of that standard, under a well-defined system of inspection, testing and quality control during production. This system, which is devised and supervised by ISI and operated by the producer, has the further safeguard that the products as actually marketed are continuously checked by ISI for conformity to the standard. Details of conditions, under which a licence for the use of the ISI Certification Mark may be granted to manufacturers or processors, may be obtained from the Indian Standards Institution.

TABLE 1 DIMENSIONS OF OPEN-DECK SCUPPERS

(Clauses 2.1 and 4.1)

All dimensions in millimetres.



For Nominal Sizes 40 and 50

For Nominal Sizes 65 and Above

NOMINAL SIZE	d	BOLT HOLE DIA d_1	h	d_2	NO. OF BOLT HOLES
40	130	14	84	100	4
50	140	14	90	110	4
65	160	14	90	130	4
80	190	18	100	150	4
100	210	18	104	170	4

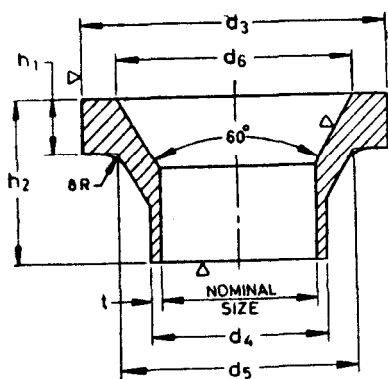
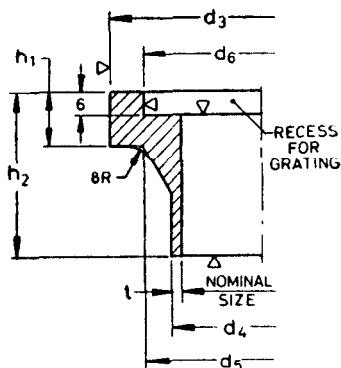
*For dimensions, see Table 2.

TABLE 2 DIMENSIONS OF SCUPPER HEAD

(Clauses 2.2 and 4.1)

All dimensions in millimetres.

~ (▽)

Scupper Head with welded
Grating BarsScupper Head with Removable
Grating

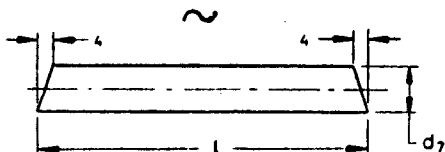
(Grating Bars Detail not Shown)

NOMI- NAL SIZE	d_3	d_4	d_5	d_6	h_1	h_2	t
40	78	48.3	60	60	14	42	2.5
50	90	60.3	72	72	14	45	3
65	120	76.1	90	98	14	45	3
80	130	88.9	105	110	16	50	3.5
100	150	114.3	125	130	16	52	4

TABLE 3 DIMENSIONS OF GRATING BARS

(Clause 4.1)

All dimensions in millimetres.



NOMINAL SIZE	d_7	l
40	10	52
50	10	64
65	12	86
80	12	98
100	12	118